

## CLAIMS

1. A method of depositing material on a substrate comprising the steps of arranging the material to be deposited in a container such that the material  
5 has a free surface, and contacting said surface with a beam of electrons to so as to evaporate the material and transfer the material to the substrate, a shield opaque to electrons being arranged to cover a portion of the surface contacted by said beam of electrons, and causing relative movement between the container on one hand and the shield and the beam of electrons on the  
10 other hand such that said portion of the surface previously contacted by the beam of electrons is no longer covered by the shield and is exposed to the substrate.
2. A method according to claim 1, wherein the relative movement  
15 comprises relative rotation.
3. A method according to claim 2, wherein the container is moved whilst the shield and beam of electrons are held stationary.
- 20 4. A method according to claim 1, 2 or 3, comprising heating the material by means of a heat source additional to the beam of electrons.
5. Apparatus for depositing material on a substrate, comprising a container for containing the material to be deposited, an electron gun for  
25 contacting the material with a beam of electrons so as to evaporate the material and transfer the material to the substrate, a shield opaque to electrons arranged to cover a portion of the container, and means for causing relative movement between the container on one hand and the shield and the electron gun on the other hand.

6. Apparatus according to claim 5, wherein the means for causing relative movement comprises means for rotating the container about an axis.
7. Apparatus according to claim 5 or 6, comprising means for heating the  
5 material, additional to the electron gun.